

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. - 13. (canceled).

14. (currently amended): An alternator comprising:

a case having a suction aperture and a discharge aperture;

a rotor disposed inside said case, said rotor being fixed to a shaft and having a fan disposed on an axial end portion;

a stator disposed so as to surround said rotor, alternating current being generated in said stator by a rotating magnetic field from said rotor; and

a rectifier disposed near an end portion of said shaft, said rectifier rectifying said alternating current generated in said stator,

wherein:

said rectifier includes:

a first heat sink;

first unidirectional conducting element bodies disposed on a surface of said first heat sink so as to be spaced apart;

a second heat sink disposed so as to be separated radially outward from said first heat sink;

second unidirectional conducting element bodies disposed on said second heat sink so as to be spaced apart; and
a circuit board having a circuit-board terminal by which said first unidirectional conducting element bodies and said second unidirectional conducting element bodies are connected so as to constitute a bridge circuit, and

a terminal connection portion, configured by connecting a terminal leading out of said first unidirectional conducting element bodies and a terminal leading out of said second unidirectional conducting element bodies respectively with said circuit board terminal, is disposed between said rotor and said circuit board.

15. (previously presented): The alternator according to Claim 14, wherein:

said fan is a centrifugal fan; and

said terminal connection portion is disposed radially outside said centrifugal fan.

16. (previously presented): The alternator according to Claim 14, wherein:

said fan has an annular plate disposed on an end portion near said circuit board.

17. (previously presented): The alternator according to Claim 14, wherein:

said terminal connection portion is configured by extending axially and connecting said terminal of said first unidirectional conducting element bodies, said terminal of said second unidirectional conducting element bodies and said circuit board terminal respectively.

18. (previously presented): The alternator according to Claim 14, wherein:

said first heat sink and said second heat sink each have a horseshoe shape; and

said second heat sink is disposed radially outside said first heat sink.

19. (previously presented): The alternator according to Claim 14, wherein:
an outer peripheral portion of said second heat sink is in surface contact with said case.
20. (previously presented): The alternator according to Claim 14, wherein:
said first heat sink and said second heat sink are made of aluminum.
21. (previously presented): The alternator according to Claim 14, wherein:
a resin coating is formed on a surface of said first heat sink and said second heat sink.
22. (canceled).
23. (previously presented): The alternator according to Claim 14, wherein:
said first unidirectional conducting element bodies are fitted into a penetrating aperture
formed on said first heat sink; and
said second unidirectional conducting element bodies are fitted into a penetrating
aperture formed on said second heat sink.
24. - 25. (canceled).
26. (previously presented): The alternator according to Claim 14, wherein:
a lead wire connection portion in which a lead wire of said stator is connected to said circuit
board terminal of said circuit board projects outward near said rotor.